

WHAT IS CLAIMED IS:

1. A method of making a polyurethane foam, comprising (1) forming a reaction mixture by mixing, under reaction conditions,
 - (a) an isocyanate-reactive component containing a polyol or mixture thereof having an average hydroxyl number of from 300 to 600 and an average of at least 3 hydroxyl groups/molecule with
 - (b) an isocyanate-component containing a polyisocyanate that is reactive with the polyol or mixture thereof,in the presence of an effective amount of physical blowing agent selected from the group consisting of hydrofluorocarbons having from 2 to 4 carbon atoms and from 0.1 to 4 parts by weight water per 100 parts by weight of the polyol or mixture thereof, and (2) subjecting the reaction mixture to conditions such that it reacts, expands and cures within an enclosed space to form a rigid polyurethane foam within said enclosed space, wherein at least 10 percent by weight of said polyol or mixture thereof is one or more hydroxyl group containing, toluene diamine-initiated polyethers, wherein the toluene diamine-initiated polyether(s) have an average hydroxyl number of from 300 to 600, and further wherein oxyethylene (-CH₂-CH₂-O-) groups constitute 2 to 25 percent of the total weight of the toluene diamine initiated polyether(s).
2. The method of claim 1, wherein the physical blowing agent is selected from HFC 134A, HFC 245fa, HFC 365mfc and mixtures thereof.
3. A method of making a polyurethane foam, comprising (1) forming a reaction mixture by mixing, under reaction conditions,
 - (a) an isocyanate-reactive component containing a polyol or mixture thereof having an average hydroxyl number of from 300 to 600 and an average of at least 3 hydroxyl groups/molecule with
 - (b) an isocyanate-component containing a polyisocyanate that is reactive with the polyol or mixture thereof,in the presence of an effective amount of physical blowing agent selected from the group consisting of alkanes having 3-6 carbon atoms and cycloalkanes having 5-6 carbon atoms and from 0.1 to 4 parts by weight water per 100 parts by weight of the polyol or mixture thereof, and (2) subjecting the reaction mixture to conditions such

that it reacts, expands and cures within an enclosed space to form a rigid polyurethane foam within said enclosed space, wherein at least 10 percent by weight of said polyol or mixture thereof is one or more hydroxyl group containing, toluene diamine-initiated polyethers, wherein the toluene diamine-initiated polyether(s) have an average hydroxyl number of from 300 to 600, and further wherein oxyethylene (-CH₂-CH₂-O-) groups constitute 2 to 25 percent of the total weight of the toluene diamine initiated polyether(s).

4. The method of claim 1 or 3, wherein the toluene diamine-initiated polyether(s) have an average oxyethylene group content of 3 to 20 percent by weight.
5. The method of claim 4, wherein the toluene diamine is at least 50 percent by weight the 2-3- isomer.
6. The method of claim 1 or 3, wherein the toluene diamine-initiated polyether(s) constitute at least 50 percent by weight of the polyol or mixture thereof.
7. The method of claim 6, wherein the toluene diamine-initiated polyether(s) have an average oxyethylene group content of 6 to 15 percent by weight.
8. The method of claim 7, wherein the toluene diamine-initiated polyether(s) constitute at least 80 percent by weight of the polyol or mixture thereof.
9. The method of claim 3, wherein the physical blowing agent is selected from alkanes having 3-6 carbon atoms and cycloalkanes having 5-6 carbons atoms, or a mixture of two ore more of said blowing agents.
10. The method of claim 1 or 3, wherein the isocyanate-reactive component and the isocyanate component are mixed in the presence of a surfactant and a catalyst.
11. The method of claim 1 or 3, wherein the enclosed space is a wall of a freezer, refrigerator or cooler.

12. An isocyanate-reactive composition comprising

(a) an isocyanate-reactive component containing a polyol or mixture thereof having an average hydroxyl number of from 300 to 600 and an average of at least 3 hydroxyl groups/molecule, (b) an effective amount of a physical blowing agent selected from the group consisting of hydrofluorocarbons having from 2 to 4 carbon atoms and (c) from 0.1 to 4 parts by weight water per 100 parts by weight of the polyol or mixture thereof, wherein at least 10 percent by weight of said polyol or mixture thereof is one or more hydroxyl group containing toluene diamine-initiated polyethers, the toluene diamine-initiated polyether(s) have an average hydroxyl number of from 300 to 600, and oxyethylene groups constitute 2 to 25 percent of the total weight of the toluene diamine initiated polyether(s).

13. The composition of claim 12, wherein the physical blowing agent is selected from HFC 134A, HFC 245fa, HFC 365mfc and mixtures thereof.

14. An isocyanate-reactive composition comprising

(a) an isocyanate-reactive component containing a polyol or mixture thereof having an average hydroxyl number of from 300 to 600 and an average of at least 3 hydroxyl groups/molecule, (b) an effective amount of a physical blowing agent selected from the group consisting of alkanes having 3-6 carbon atoms and cycloalkanes having 5-6 carbon atoms, or a mixture of any two or more of the foregoing physical blowing agents and (c) from 0.1 to 4 parts by weight water per 100 parts by weight of the polyol or mixture thereof, wherein at least 10 percent by weight of said polyol or mixture thereof is one or more hydroxyl group containing toluene diamine-initiated polyethers, the toluene diamine-initiated polyether(s) have an average hydroxyl number of from 300 to 600, and oxyethylene groups constitute 2 to 25 percent of the total weight of the toluene diamine initiated polyether(s).

15. The composition of claim 12 or 14, wherein the toluene diamine-initiated polyether(s) have an average oxyethylene group content of 3 to 20 percent by weight.

16. The composition of claim 15, wherein the toluene diamine is at least 50 percent by weight the 2-3- isomer.

17. The composition of claim 16, wherein the toluene diamine-initiated polyether(s) constitute at least 50 percent by weight of the polyol or mixture thereof.

18. The composition of claim 17, wherein the toluene diamine-initiated polyether(s) have an average oxyethylene group content of 6 to 12 percent by weight.

19. The composition of claim 18, wherein the toluene diamine-initiated polyether(s) constitute at least 80 percent by weight of the polyol or mixture thereof.

20. The composition of claim 14, wherein the physical blowing agent is selected from alkanes having 3-6 carbon atoms and cycloalkanes having 5-6 carbons atoms, or a mixture of two ore more of said blowing agents.

21. The composition of claim 12 or 14, wherein the isocyanate-reactive component and the isocyanate component are mixed in the presence of a surfactant and a catalyst.

22. A method of making a polyurethane foam, comprising (1) forming a reaction mixture by mixing, under reaction conditions,

(a) an isocyanate-reactive component containing a polyol or mixture thereof having an average hydroxyl number of from 300 to 600 and an average of at least 3 hydroxyl groups/molecule with

(b) an isocyanate-component containing a polyisocyanate that is reactive with the polyol or mixture thereof,

in the presence of an effective amount of physical blowing agent selected from the group consisting of hydrofluorocarbons having from 2 to 4 carbon atoms, alkanes having 3-6 carbon atoms and cycloalkanes having 5-6 carbon atoms, or a mixture of any two or more of the foregoing physical blowing agents, and from 0.1 to 4 parts by weight water per 100 parts by weight of the polyol or mixture thereof, and (2) subjecting the reaction mixture to conditions such that it reacts, expands and cures within an enclosed space to form a rigid polyurethane foam within said enclosed space, wherein at least 10 percent by weight of said polyol or mixture thereof is one or more hydroxyl group containing, toluene diamine-initiated polyethers, wherein the toluene

diamine-initiated polyether(s) have an average hydroxyl number of from 300 to 600, and further wherein oxyethylene (-CH₂-CH₂-O-) groups constitute 2 to 25 percent of the total weight of the toluene diamine initiated polyether(s).